



PCT10

## RAW SEQUENCE LISTING

DATE: 01/22/2002

PATENT APPLICATION: US/10/030,019

TIME: 10:29:45

Input Set : A:\candida1.app.txt

Output Set: N:\CRF3\01182002\J030019.raw

*pp 1,3,6-7*

**Does Not Comply  
Corrected Diskette Needed**

3 <110> APPLICANT: Contreras, Roland  
 4 DeBacker, Marianne  
 5 Luyten, Walter  
 6 Lanaerts, Isabelle  
 7 Nelissen, Bart  
 8 Reekmans, Rieka  
 10 <120> TITLE OF INVENTION: Cell death related drug targets in yeast and fungi  
 12 <130> FILE REFERENCE: JAN-002-PCT  
 14 <140> CURRENT APPLICATION NUMBER: US/10/030,019  
 15 <141> CURRENT FILING DATE: 2001-12-26  
 17 <150> PRIOR APPLICATION NUMBER: 99870141.1  
 18 <151> PRIOR FILING DATE: 1999-07-01  
 20 <160> NUMBER OF SEQ ID NOS: 484  
 22 <170> SOFTWARE: PatentIn Ver. 2.1

## ERRORED SEQUENCES

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 21495 <212> TYPE: DNA  
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 21501 tttttgagta gatataacag aactaccaa agtgagcca catctgttaa tcttgaaaag 180  
 21502 caaaattgag aaaaccattt atgcaagtcg tgtactggtg atattcttgg tcaattgcta 240  
 E--> 21503 cacttttgta atgaatactg taatgtagcc gacgtgggtt ~~gaagaatata tatttaagta~~ 300  
 21504 tatagaatca ggtcaatata aaatgtttga aatataacaa aatgtttcaa tgtaaactga 360  
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 21510 ccagaaaact tggcaaatcg aacgtagcag ttttttcgtc atctgggtgg aatgcaggat 720  
 21511 tagcagctgc ttatgccagc cagttttttg gagtatcgtg cactgtgggtg ttgcctgaaa 780  
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 21518 cgggtcaaaga aggtaaagtt gttcatttac aaaaagtgca aactttggcc acttctttgg 1200

*see  
item 9  
on Encl  
summary  
sheet*

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 21521 atatggttga gcttgcattg ggtgcatccg ttgcatcagt gatgcacagg caagatttat 1380  
 21522 tgaataaatt tgggtacatta agtcagatg atattatcat tgttgtcata tgtggtggat 1440  
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 22364 <211> LENGTH: 4619  
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 22366 <213> ORGANISM: Candida albicans  
 22368 <400> SEQUENCE: 389

P.3

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 22371 cgcgttatat tacttatcct ttctgtaatt tcttgatctc tgtttgaatc aacaacgcct 180  
 22372 ttgttttctc tttctgcctc cctctgccac cccagttta tttgtttgct tgtcgacgtg 240  
 22373 ctgccaaaaa aaaaaattga gttctctctc tcttttttac aacagagaag agacaaagaa 300  
 22374 aaaaaaaac atcaaaaatta agattcaagc tttttttttt agttttttta acaacaaaat 360  
 22375 tgaatttaca atccttgaat ttacaacttc atattcagct ctaaatacta ataattataa 420  
 22376 caataattaa ttgaatttatt ctataaaacca ctgatatttg attttatctt tttatttttg 480  
 22377 tttgttccca taattgtgtc atgcctgaca atatagaaga tcgatccgag ataccttctg 540  
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 22380 acaaccttgc atccaaacgt caattaatca atgattttat acacaatgat cattttgaag 720  
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 22384 cagaagtatt tcaacatttg ggtgaatggt ttggaatatt gggccaacca attattagag 960  
 22385 ctatcattat taatccagac accaaagaaa aacagattga aagattcccg ccattatttt 1020  
 22386 ggggttcatca attaggtaaa aagacgcaac caacatactt gcgacaccgt cataatggaa 1080  
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 22410 tcaatagttt tggttttatt agaaagaaat tattagaaac agtttcttta ttgagtaaaa 2520  
 22411 ttgatttggt tgatgaatat gaaaaataa aaaggagtaa tgaagattac gttgaaaaag 2580  
 22412 tattttacaa aaaactggat ttccctgcat tgtcacagcc attagaaacc tccgattgtg 2640  
 22413 aaaaaacaa caataatact agcgacaacg acgacgatga ggatgctgac aacgatgaag 2700  
 22414 gctatgatag tgaagtgtct ttggctaacc cataccttgg agctaatttt gggttcaaaa 2760  
 22415 tcatgtatgt tcatgactat agccctaagt tgaattctaa ccttcgtagc aggtacaatc 2820  
 22416 atgaccaaac aaccaaattc aaacaaacag agagagttat taatgttcct acacacaaac 2880  
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 22418 atttttatcc tgattataaa agatggatg atgagatgga ccaattgggt gaggaagtga 3000  
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 22421 caactgtacc tgctgctgct gaaacggtag ctccaccatt acctgttaga aataatactg 3180  
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 22449 <211> LENGTH: 1372  
 22450 <212> TYPE: PRT  
 22451 <213> ORGANISM: Candida albicans  
 22453 <400> SEQUENCE: 390  
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 22458 20 25 30  
 22460 Thr Asn Val Asp Asn Glu Leu Pro Gln Gly Glu Ser Asn Glu Gln Thr  
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Item 9

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Input Set : A:\candidal.app.txt

Output Set: N:\CRF3\01182002\J030019.raw

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22469 Ile Pro Gln Asn Phe Leu His Glu Phe Leu Asn Leu Pro Ile Asp Asn
22470                      85                      90                      95
22472 Phe Ser Asp Leu Lys Asp Gln Leu Gly Pro Ile Asp Phe His Ser Leu
22473      100                    105                    110
22475 Leu Asn Glu Gln Gly Asn Leu Tyr Pro Glu Asn Glu Glu Pro Val Thr
22476      115                    120                    125
22478 Phe Cys His Val Ser Pro Glu Val Phe Gln His Leu Gly Glu Trp Phe
22479      130                    135                    140
22481 Gly Ile Leu Gly Gln Pro Ile Ile Arg Ala Ile Ile Ile Asn Pro Asp
22482      145                    150                    155                    160
22484 Thr Lys Glu Lys Gln Ile Glu Arg Phe Pro Pro Leu Phe Trp Val His
22485                      165                    170                    175
22487 Gln Leu Gly Lys Lys Thr Gln Pro Thr Tyr Leu Arg His Arg His Asn
22488      180                    185                    190
22490 Gly Ser Asn His Asn His His His His Gly His His Asp Ser Pro Ile
22491      195                    200                    205
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22494      210                    215                    220
22496 Ile Arg Tyr Asn Val Leu Lys Ala Pro Arg Lys Ser Thr Lys Asp Phe
22497      225                    230                    235                    240
22499 Arg Ile Trp Phe Ile Val Pro Gln Asp Lys Gly Leu Gln Tyr Leu Ile
22500                      245                    250                    255
22502 Ser Ile Gln Thr Phe Met Phe Asp Ile Ser Lys Lys Thr Leu Val Ser
22503      260                    265                    270
22505 Pro Asn Met Leu Glu Asp Ala Leu Lys Asp His Gly Ile Val Ala Ser
22506      275                    280                    285
22508 Ser Tyr Asn Ile Met Val Glu Ala Lys Glu Lys His Gln Thr Glu Phe
22509      290                    295                    300
22511 Pro Ile Asp Gln Phe Ile Leu Ser His Ser Asn Ala Tyr Glu Glu Val
22512      305                    310                    315                    320
22514 Ser Gln Gly Gly Gly His Leu Gly Leu Ser Asn Met Gly Asn Thr Cys
22515                      325                    330                    335
22517 Tyr Met Asn Ser Ala Leu Gln Cys Leu Leu His Val Pro Glu Ile Asn
22518      340                    345                    350
22520 Tyr Tyr Phe Phe Tyr Asn Ile Tyr Lys Lys Glu Leu Asn Phe Asp Asn
22521      355                    360                    365
22523 Pro Leu Gly Tyr His Gly Asp Val Ala Asn Ala Phe Gly Ser Leu Leu
22524      370                    375                    380
22526 Lys Gln Ala Phe Asp His Val Lys Asn Ser Ser Ser Ile Ser Pro Arg
22527      385                    390                    395                    400
22529 Glu Phe Lys Ser Thr Ile Gly Arg Tyr Ser Ser Met Phe Ser Gly Tyr
22530                      405                    410                    415
22532 Leu Gln Gln Asp Ser Gln Glu Leu Leu Ser Trp Leu Leu Asp Ala Leu
22533      420                    425                    430
22535 His Glu Asp Leu Asn Arg Ile His Gln Lys Pro Tyr Cys Glu Lys Pro

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22542 465          470          475          480
22544 Ile Asp Leu Phe Thr Gly Leu Tyr Gln Ser Thr Leu Ile Cys Pro Asp
22545          485          490          495
22547 Cys Gly Lys Lys Ser Ile Thr Phe Asp Pro Phe Asn Asp Leu Thr Leu
22548          500          505          510
22550 Pro Leu Pro Ile Ser Lys Lys Trp Tyr His Thr Phe Thr Ile Val Asp
22551          515          520          525
22553 Leu Ser Asn Gln Gly Val Ile Pro Glu Arg Ile Met Lys Leu Glu Val
22554          530          535          540
22556 Glu Leu Asn Lys Thr Ser Asn Phe Asp Asp Leu Leu Ser Tyr Leu Ser
22557 545          550          555          560
22559 Asn Phe Leu Asn Val Pro Ser Thr Glu Leu Phe Ala Tyr Glu Ile Phe
22560          565          570          575
22562 Gln Asn Ala Ile Tyr Ser Asp Phe Gln Leu Asp Tyr Thr Lys Asn Lys
22563          580          585          590
22565 Phe Leu Pro Ile Ser Asp Ile Ile Arg Asp Thr Asp Asp Val Ile Val
22566          595          600          605
22568 Tyr Ile Val Pro His Asn Pro Ala Val Asp Ile Ile Val Pro Val Phe
22569          610          615          620
22571 Asn Ala Val Glu Asp Ala Asp Ser Ser Tyr Gln Met Val Asn Phe Phe
22572 625          630          635          640
22574 Gly Ile Pro Leu Phe Val Val Met Asn Lys Glu Val Asp Val Asn Ser
22575          645          650          655
22577 Phe Gly Phe Ile Arg Lys Lys Leu Leu Glu Thr Val Ser Leu Leu Ser
22578          660          665          670
22580 Lys Ile Asp Leu Val Asp Glu Tyr Glu Lys Ile Lys Arg Ser Asn Glu
22581          675          680          685
22583 Asp Tyr Val Glu Lys Val Phe Tyr Lys Lys Ser Asp Phe Pro Ala Leu
22584          690          695          700
22586 Ser Gln Pro Leu Glu Thr Ser Asp Cys Glu Lys Asn Asn Asn Asn Thr
22587 705          710          715          720
22589 Ser Asp Asn Asp Asp Asp Glu Asp Ala Asp Asn Asp Glu Gly Tyr Asp
22590          725          730          735
22592 Ser Glu Val Ser Leu Ala Asn Pro Tyr Leu Gly Ala Asn Phe Gly Phe
22593          740          745          750
22595 Lys Ile Met Tyr Val His Asp Tyr Ser Pro Lys Leu Asn Ser Asn Leu
22596          755          760          765
22598 Arg Ser Arg Tyr Asn His Asp Gln Thr Thr Lys Phe Lys Gln Thr Glu
22599          770          775          780
22601 Arg Val Ile Asn Val Pro Thr His Lys Pro Thr Phe Ser Asp Phe Lys
22602 785          790          795          800
22604 Pro Leu Ser Asp Gln Leu Ser Glu Ser Lys Arg Asn Tyr Tyr Phe Tyr
22605          805          810          815
22607 Pro Asp Tyr Lys Lys Met Asp Asp Glu Met Asp Gln Leu Val Glu Glu
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 22613 Glu Asn Ser Ser Arg Ala Ser Glu Glu Gln Asp Gly Phe Val Leu Ile  
 22614 850 855 860  
 22616 Asn Lys Glu Asp Thr Leu Lys Gln Gln Ser Thr Val Pro Ala Ala Ala  
 22617 865 870 875 880  
 22619 Glu Thr Val Pro Pro Leu Pro Val Arg Asn Asn Thr Gly Val His  
 22620 885 890 895  
 22622 Ile Pro Ser Ser Asp Glu Glu Thr Glu Ser Glu Ala Asn Leu Gly Ser  
 22623 900 905 910  
 22625 Leu Phe Asp Ser Thr Ser Asn Leu Pro Leu Pro Pro Pro Ser Thr Tyr  
 22626 915 920 925  
 22628 Ser Glu Ser Thr Lys Pro Ser Asn Val Asn Ser Pro Met Glu Ser Asn  
 22629 930 935 940  
 22631 Phe Glu Ser Ser Ser Ala Asp Leu Asn Ser Gly Thr Thr Leu Ile Ser  
 22632 945 950 955 960  
 22634 Lys Asp Thr Val Leu Leu Cys Asp Trp Asp Lys Glu Ile Tyr Gln Lys  
 22635 965 970 975  
 22637 Cys Phe Gly Asp Lys Glu Leu Gln Ala Trp Glu Asn Ile Ser Asn Leu  
 22638 980 985 990  
 22640 Pro Asn Pro Glu Leu Glu Lys Asn Arg Ala His Phe Glu Arg Gln Arg  
 22641 995 1000 1005  
 22643 Lys Ala Lys Ile Thr Leu Ser Asp Cys Leu Lys Ser Phe Ser Thr Pro  
 22644 1010 1015 1020  
 22646 Glu Ile Leu Gly Glu His Asp Leu Trp Tyr Cys Pro Arg Cys Thr Glu  
 22647 1025 1030 1035 1040  
 22649 His Lys Arg Ala Thr Lys Thr Ile Gln Leu Trp Ser Thr Gly Asp Ile  
 22650 1045 1050 1055  
 22652 Leu Thr Ile His Leu Lys Arg Phe His Ser Ala Arg Ala Phe Ser Asp  
 22653 1060 1065 1070  
 22655 Lys Ile Asp Val Leu Val Asp Phe Pro Ile Glu Gly Leu Asp Ile Ser  
 22656 1075 1080 1085  
 22658 Ser Tyr Val Ala Asn Thr Asp Leu Thr Pro Glu Asp Cys Leu Tyr Asp  
 22659 1090 1095 1100  
 22661 Leu Ile Ala Val Asp Asn His Tyr Gly Gly Leu Gly Gly Gly His Tyr  
 22662 1105 1110 1115 1120  
 22664 Thr Ala Ser Val Lys Asn Phe Arg Asp Asp Lys Trp Tyr Tyr Phe Asn  
 22665 1125 1130 1135  
 22667 Asp Ser Arg Val Thr Glu Ile Asn Asn Pro Gln Glu Val Val Ala Asn  
 22668 1140 1145 1150  
 22670 Ser Ala Tyr Leu Leu Phe Tyr Arg Arg Arg Ser Ser Lys Gly Ala Gly  
 22671 1155 1160 1165  
 22673 Ile Leu Gly Gly Glu Asn Phe Ile Asp Leu Leu Gln Lys Gly Arg Glu  
 22674 1170 1175 1180  
 22676 Glu Tyr Ser Glu Ser Leu Gln Lys Lys Arg Leu Val Leu Gln Asn Val  
 22677 1185 1190 1195 1200  
 22679 Gly Gln Ile Val Asn Thr Tyr Ala Lys Ile Glu Gln Asp Ile Ile Asp  
 22680 1205 1210 1215  
 22682 Lys Glu Thr Glu Lys Gln Lys Glu Glu Gln Glu Gln Glu Gln

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22683          1220          1225          1230
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22686          1235          1240          1245
22688 Asp Gln Glu Gln Glu Pro Asp Gln Glu Pro Asp Gln Asp Gln Asp Gln
22689          1250          1255          1260
22691 Glu Pro Asp Gln Glu Pro Asp Gln Asp Gln Glu Gln Asn Glu Thr Ile
22692 1265          1270          1275          1280
22694 Lys Lys Ser Arg Pro Phe Asp Glu Leu Lys Pro Ser Thr Ser Glu Thr
22695          1285          1290          1295
22697 Asn Asn Gln Gln Gln Thr Thr Gln Phe Asn Phe Asp Asp Glu Asp Asn
22698          1300          1305          1310
22700 Asp Tyr Asp Tyr Glu Ala Glu Val Glu Asp Ser Asn Ile Arg Lys Gln
22701          1315          1320          1325
22703 Arg Leu Leu Ser Lys Glu Asn Asn Ser Asn Lys Leu Val His Ile Lys
22704 1330          1335          1340
22706 Ser Asn Gly Arg Gln Glu Val Thr Ser Ser Pro Val Pro Ile Glu Thr
22707 1345          1350          1355          1360
22709 Asp Gly Asp Thr Asp Val Thr Asp Ser Asn Ser Thr
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25996 &lt;210&gt; SEQ ID NO: 451

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25998 &lt;212&gt; TYPE: DNA

25999 &lt;213&gt; ORGANISM: Candida albicans

26001 &lt;400&gt; SEQUENCE: 451

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26002 ctctagaagt aggacatcgt atagtgtata aacactcaat aagtaatgaa gaaacacggt 60
26003 ttgtttgtgca atgttagctg gcgagctcaa tattgggtct ctccgccgtc tgtctgcctt 120
26004 gcattctact ttttttctcc ttatggaaaa cattagtact agtagtggtg gtagtagttg 180
26005 ctgtttgtttg cactttgcac gtagttgttt tcccctcatt ctttcatctg attattctgt 240
26006 ctttgttaac tgcatacaaa gggaggggaa gaagaaacaa caaaagggga atttgaatat 300
26007 acgtcaatct tttaatccta ctaccacggg gggggggggg gtcatacttc ttggtgtaaa 360
26008 taatgtatgg agattgaggt tattagactt ttagaaagag gtcttggttg agtaaggcgg 420
26009 gatagcaciaa ataatgcgtg tctaattggt cagagaataa tatgctttgg ggaacaatag 480
E--> 26010 aaagatgtag cgagagaaat agaatttcaa gggtaaggat gattaacttt tttttttttt 540
26011 aatgcttgga gtactttggt gttggaaaga gtattgcaga agtaatagtt taataaaaga 600
26012 aaagtatata acttttagta tccggagaaca attgaaatca atattttgaa aatatagttt 660
26013 tatagagtaa cctgggtcga ggtgaaccgc aattcaatat tggttttcgg ttgttatatg 720
26014 ctacataacc atcctcatct tgaatgaaac aaggataata gaaatgagta tattaaacaa 780
26015 acaacattat gttgttactg ttgtattctg ttttttggtc attgccatgg taatttcata 840
26016 tttagtaaca atttagtggt catcgtaagt ctctccttct ctgggagatg ttctctctct 900
26017 ctttctctct cttgttggtt ttgttgtaaa ttgttaattg ttgattattg attgttcccc 960
26018 aattaaaatt ccgataaact tgaacaataa attgtcatca taaatttttt tttagaaaat 1020
26019 cactccataa attaaattta tttatatatt aaatttttaa tcggaaacttc cgtcaattgg 1080
26020 attcggtttt tttttttttt atttggtcat ttatttcttg attttatttt ctttttgctt 1140
26021 cctacttctc ttttattttt ttagtttcat aatttttgac agataatact tgaaactggg 1200
26022 taatttttaa tcaacttcgt gatttttttc cggaaatcta ataatatcaa tgaccagtaa 1260
26023 tctgccacca cttgggttcta caactaacga tcagagacta ccccaaagcg gagtttcata 1320
26024 catacccaca aataaattgc ctttacctaa tgccaatgaa gattttgcca cgggtgtgtc 1380
26025 gaatggagat gttgactggc tatttcgagg taaatcaaag aaattgggga aaaagatggc 1440
26026 taacaacaat gccataaagg atgaacgaaa gaatagtcac ggtaacatca aaaactcgga 1500

```

Item 9

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/030,019

DATE: 01/22/2002

TIME: 10:29:50

Input Set : A:\candidal.app.txt

Output Set: N:\CRF3\01182002\J030019.raw

```

26027 aaaaactacc gcaaaaccca atgaaactaa acatgagtct aatgggtgaga agttagaatt 1560
26028 caatgttcca aaatctgtaa tgccaacaaa gcatacatcg tctgggaacc caaaagcacc 1620
26029 taccaatgga caaatctcaa atgtaacacc aagtcaacca agtccgaaac agaccacttc 1680
26030 tgggtcaaca aatgcaaatg atataacctcc aattttctcct aaacaaccag aaaaggcatc 1740
26031 aaagtgtaat aaactaaaaa ttgggcgttc aagatcgtct tctgcatcaa cagtcgtacc 1800
26032 ttcatctaca acagcttcaa ctactactaa tccctggagat cctaaaagtc aacccaaaaag 1860
26033 acggagcagt agtttttaact ttgttactcc ttccttgacg agtgatttgg catatgacga 1920
26034 tctgcatctg gtatctcaat tatcaaacaa ttcaaattct ctgaactcat cctcgccctaa 1980
26035 tgtttctcgt tcaaatagca aaaaagggtg gttattcagt tcactttcat caaaatttag 2040
26036 atcaagctcg gcttcatcta aacaaccaca actgcattca tctgtctaac catcaaccac 2100
26037 aacgacaaat ggtggcggta actcgtccgc tgcctcaaaa tcatcccatc actcccccaa 2160
26038 atttaatcct tcacttggtg gtccagtatc aaagcacaat cgagaagctg aagatttggg 2220
26039 gtctcttacc aatactttgc ctgctgggag tggaatacca attaaacgta aaccatcaat 2280
26040 atcgggaaat tcaattttca aagattcatt tctcgatgat gcaagttctt caccgtcatc 2340
26041 ttcattnaac tctgatggg ggcttaagtt tttcaggaga cgttcctctg tggcatctac 2400
26042 accatcaaca cacgcgtcaa cacctcgatg gattttgaac aaaaacccca ataggagaaa 2460
26043 agtaccattt gaagaaatat ctgaagttcg attgcgtcgg gttacctttt ctggtgataa 2520
26044 actcgagcac gatccgcaac agcagattcc ttcaagaaga cctaaaagag gtaattgttt 2580
26045 aattccacag gacatcaatg caccacctcc aagactatgt cttgggattt cagttaatga 2640
26046 accaaataat aaagatgacg gtaaatcaca caaccattcc aaatatagtg atcatgaaat 2700
26047 tgcattagct gaagatgctc aacgccgagc aattattgaa gcagaaaaac atgctcaaga 2760
26048 agctcatcga caagccaaaa agattgctca agaagtttct gggtatagat cacatagatt 2820
26049 catatccatt aaagaagggt gtagtggttg taattctaac accaacggca acgacaatga 2880
26050 cgaagatgat gatgaggttg aagaagcagt tgataagaaa ttggcaaatg atgtttctgt 2940
26051 ggatggaccg ttgcatgtcc acgaacaaca tttcgaagaa gaaattgaaa gcaaaacagg 3000
26052 tgaaaagacc atttcattgg aaacaatcta tacaagatgt tgcattttac gagaattttt 3060
26053 accaatccca gcaacattga aacaattgaa aaataagaca gcaccgttg gaaattgaaa 3120
26054 gatgctcaac ccaaaaccaa ctttaattga tgtgttatct ttttcagatt ttattgccat 3180
26055 tacacctatt aacacggtca tttttgataa cgtgactatg acaacagaga tgttgaaaaa 3240
26056 ctttcttgga tctgtgacat ataataaaca attggaaaag ttatcgttga gaaatgtttc 3300
26057 cattgatgag ttgggatgga agtatttgtg tgaatttttg gcaacaaata aaacagttaa 3360
26058 gaaattggat atatcacaa aacgtatcaa gccagatacc ccagacacaa gcattcgttg 3420
26059 taatatgaac tgggacttat ttattcgatc attaattttg cgtgggtgaa tagaagaatt 3480
26060 gggttatcaat ggatgtaaac tatccgatgc aatatttgaa aagttcatca atcaagcggg 3540
26061 taagaagtca acctatcgat taggtattgc tggattgat ttgaatgtta aaaaatcaga 3600
26062 aatggtcaca tctgtgttaa ctgatggtaa ttctcaatgt gttgggttg atattgcttt 3660
26063 taatgatttg agcaagggac aattacgtcc attcattaat gcgtttaaca ctggcacaagt 3720
26064 caacaattta gtgttttttt cattgaattc aaccaattta ctgaacattg aagaaacttc 3780
26065 tgacttgatc aagtcattaa ttaattgtta aacattacga ttttttagatt taagttccat 3840
26066 acctaatatc ttcccgaaaa taattaccca tttggacaaa tacttgccca gatatcctaa 3900
26067 tcttcgaaga atacattttg atcttaatga attaacgca caagctattg ggtcattggc 3960
26068 ggggtgttta ctgaaaatgc cccaattagt tcatgtctcg ttattgggta atagaaaatt 4020
26069 gtcaactacg tcagcagcta cattatacgg agcagttaaa caatccaaga ccttggttgc 4080
26070 tcttgatttg gactacgatt taatacctga tcaattatca caactgattg ccttttattt 4140
26071 gatgagaaac ttggaataca ctttgaagcc atctcatggc ggcaatattg aaagcaatcc 4200
26072 agaaaaacca gaggatttga tgtatgatgg atcgttatta atggaaacag ctgaaaaatt 4260
26073 attagttgaa atagaaaagg gtaagaaaga ggatatcaaa atgcaaagaa ttatatccga 4320
26074 ttcagtattg gaaagaacaa gatcgattcg taaggatatt caaaaacca ttgatacatt 4380
26075 attcgaacaa agaaatttag gtaaattatc atttgaagg aaagagaatt tagttcgatt 4440

```



## RAW SEQUENCE LISTING

DATE: 01/22/2002

PATENT APPLICATION: US/10/030,019

TIME: 10:29:50

Input Set : A:\candidal.app.txt

Output Set: N:\CRF3\01182002\J030019.raw

```

26076 ttgtttatta gattcgtctt tagaaaaatt gggtgttatg gttgaggaac atgccaacgg 4500
26077 attattatta acaccaacga cctccacgga cgatctcaga agtagagcca tgcgccatc 4560
26078 ggtcactggt gatacaatcc atgaaagtgc aaatgagttg attactgctg gaccaatttt 4620
26079 atcaccacat gtcaatagga aagcagaaca aagctcgtat ttcccagtggt ttgccaataa 4680
26080 tgataatttg acccctcatc aagttgtcgt tgagtcaaat gatgaaggta gagatgttcc 4740
26081 aatagataaa atgacaggac gaccagtttt gattcgatca attagtcaaa cttctgtgca 4800
26082 tgcaaaagag caagaaattg aagaagggga gcttcataaa tttggattct ttattcaaca 4860
26083 aaaagagaga caaaaacaac aacaacaaca acaacaaca cagaactcac accaccagca 4920
26084 ccaaccggcc cagctgatcc aacaagaaaa ccagctgccg ctgccacaac aaggaaaata 4980
26085 tgaagattta ccgatattaa atacattacc gtcaggacca gagttgagag atgctataat 5040
26086 ggcagctaag ggagtagcaa atgttactga attaattgat cgaattaata atcatcgtgt 5100
26087 taaaatcgat gcaccatcga caaaacacca tcatgaattg aacaaaccaa attctgacaa 5160
26088 agtagttgag gatgaagttg aagtttctga taatgcctct attgattcta ctaatggtga 5220
26089 cgatttacat caacttggtg acggtaaaca taatggtaat ggtacgggtg atcccatggt 5280
26090 tagtgaagtt tatgacaagt tgtaaataa tgctgaacga gtcagactga atagagatat 5340
26091 ataa

```

## VERIFICATION SUMMARY

DATE: 01/22/2002

PATENT APPLICATION: US/10/030,019

TIME: 10:29:51

Input Set : A:\candida1.app.txt

Output Set: N:\CRF3\01182002\J030019.raw

L:14 M:270 C: Current Application Number differs, Replaced Current Application Number  
L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:21503 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:375  
L:22419 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:389  
L:22610 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:390  
L:26010 M:340 E: (46) "n" or "Xaa" used: Feature required, for SEQ ID#:451

# Raw Sequence Listing Error Summary

## ERROR DETECTED

## SUGGESTED CORRECTION

SERIAL NUMBER: 12/030, 019

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1      Wrapped Nucleics  
    Wrapped Aminos      The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2      Invalid Line Length      The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3      Misaligned Amino  
    Numbering      The numbering under each 5<sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4      Non-ASCII      The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5      Variable Length      Sequence(s)          contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6      PatentIn 2.0  
    "bug"      A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s)         . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7      Skipped Sequences  
    (OLD RULES)      Sequence(s)          missing. If intentional, please insert the following lines for each skipped sequence:  
    (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
    (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)  
    (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
    This sequence is intentionally skipped  
  
    Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8      Skipped Sequences  
    (NEW RULES)      Sequence(s)          missing. If intentional, please insert the following lines for each skipped sequence.  
    <210> sequence id number  
    <400> sequence id number  
    000
- 9      Use of n's or Xaa's  
    (NEW RULES)      Use of n's and/or Xaa's have been detected in the Sequence Listing.  
    Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  
    In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10      Invalid <213>  
    Response      Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11      Use of <220>      Sequence(s)          missing the <220> "Feature" and associated numeric identifiers and responses.  
    Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.  
    (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12      PatentIn 2.0  
    "bug"      Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13      Misuse of n      n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.